

[DOCUMENT] SUMMARY

[SUMMARY OF THE INVENTION]

[THE ISSUE]

### Abstract of the Disclosure

a> The issue to be resolved by the present invention is to provide isolation transformers with high noise attenuation rates as well as high reliability, in the high-frequency region above a few MHz, by sufficiently suppressing the amplitudes of noise attenuation characteristic curves, which are irregular, saw-tooth shaped waves with crests and troughs of various sizes, of multi-layer, multi-winding transformers,

a ~~[HOW TO RESOLVE THE ISSUE]~~

An isolation transformer comprised by a multi-layer, multi-winding primary coil 1, a multi-layer, multi-winding secondary coil 2, and a core that forms a magnetic path between the aforementioned primary coil and the aforementioned secondary coil, functions as an isolation transformer to resolve the aforementioned issue by changing the coil layers of one or both of the coils formed by winding an insulated, covered, copper-wire 5 to a multi-layer, multi-winding coil, into which a number of short-circuit rings 4 made of conducting films are inserted and layered.

The planer configuration of the aforementioned conducting short-circuit rings 4 is made approximately identical to that of the neighboring coil-layers, and their thickness is made approximately identical to or less than the skin depth of the induced current generated by the skin effect in the high-frequency region, in which resonances should be suppressed.

a ~~[THE DRAWING SELECTED]~~ Figure 1.